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Claims 1-64 have been cancelled

65. (Currently Amended) A vehicle occupant seat detection means and weight

responsive supplemental restraint device of a vehicle: comprising:

at least one seat configured with at least a seat mounting structure;

at least one weight sensing unit operatively secured beneath said at least one seat of a vehicle;

at least a computerized system communicatively connecting said weight sensing unit to a supplemental restraint system installed in said vehicle, said supplemental restraint system comprising at least one airbag system each having at least one airbag, each said airbag system corresponding to said one of said at least one seat;

said at least one weight sensing unit being configured for taking weight measurements of at least one occupant in said at least one seat, and converting said weight measurements into at least an one or more electrical signals signal, and communicating said electrical signals to said at least one computerized system;

said at least one computerized system being programmably configured to calculate at least an operating weight value from said electrical signals corresponding to said weight measurements for each said at least one seated occupant and communicating said operating weight value to said airbag system corresponding to said one of said at least one seat;

each said airbag system being operatively configured for receiving said operating weight value for said at least one seat and for adjusting a deployment unit within said airbag system to deploy said at least one airbag with a deployment force and acceleration

for airbag inflation that are proportionate to said weight measurements:

at least a memory device being disposed with said computerized system, wherein said at least one weight sensing unit further operable for monitoring the weight on said at least one seat and said computerized system further operable for correcting the weight of at least a changing occupant; and

said weight sensing unit responsive to said weight of said at least one seat, wherein said airbag system is rendered of sufficient deployment force and acceleration for said airbag inflation to keep said at least one seated occupant on said at least one seat when a collision is sensed, but is not rendered of sufficient deployment force and acceleration for said airbag inflation to cause impact injury to said at least one seated occupant.

66. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said weight sensing unit comprises at least a load cell mounted between said seat mounting structure and the vehicle floor.

67. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 66, wherein said load cell is configured with at least a strain gauge comprising electrical resistance elements.

68. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said memory device further comprises at least an EPROM ~~being operable in association~~ with said at least one computerized system, wherein said computer system is and responsive to classified data for said at least one seated occupant.

69. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 68, wherein said at least one computerized system further comprises at least one of: an emulator; a processor; an address line; a memory device; software program; a CPU; a CMOS.

70. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 69, wherein said at least one computerized system is responsive to said weight measurements ~~being communicatively configured~~ for correcting data about a changing occupant, wherein said weight sensing unit further configured for sensing weight

about the changing occupant and for generating a weight signal corresponding to the weight of said changing occupant.

71. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 67, wherein said load cell being operatively configured with said supplemental restraint system in communication with said at least one computerized system, wherein said at least one computer system further operable for adjusting the deployment force/speed of said airbag system for said at least one seat.

72. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 69, wherein said at least one computerized system further comprising a header being communicatively connected to a circuit board being operatively configured to perform at least one of: to run programs, and process data, said EPROM being operable for comparing identified compare weight data, identify new weight data, and generating generate at least a new data if said comparison is significantly different.

73. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 66, wherein said load cell further configured to measure resistance occurring when external strain is sensed on said at least one seat, and wherein said strain gauge being operable for converting said resistance into electrical energy.

74. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said at least one computerized system further comprises a control module, said control module being configured for identifying each seat for which said weight measurements are taken and for activating said airbag system corresponding to each said seat for which said weight measurement exceed a minimum weight threshold value generally corresponding to the weight of at least a small child.

75. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 74, wherein said minimum threshold value ~~is~~ comprises at least a minimum weight acting on said at least one seat.

76. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said at least one computerized system further configured for converting analog signals to digital signals corresponding to said occupant's weight.

77. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said at least one computerized system further configured to convert

said digital signals to binary signals corresponding to said operating weight value.

78. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said at least one computerized system in communication with at least one of: a read only memory device, ~~being configured with a basic input-output system, in association with at least a storage device, further comprising at least a random access memory,~~ each memory operatively configured with a software program, said random access memory being operatively configured for accessing said weight measurements.

79. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said deployment unit further comprises at least one of: a combustion chamber operatively connected to a canister of igniting gas, a microprocessor being configured for receiving an operating weight value, a microprocessor electrically connected to an accelerometer, an accelerometer further comprising at least a piezoelectric elements communicatively connected to a canister of igniting gas, a collision sensor operatively connected to a processor in communication with a combustion chamber.

80. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 79, wherein said canister of igniting gas being configured with at least a microprocessor, said microprocessor being electrically connected to at least a relay in association with at least one of: a gas release valve, an igniter, said relay in communication with said gas release valve for releasing proportionate amount of gas into said combustion chamber, said igniter operatively configured for igniting said released gas for said airbag deployment.

81. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 79, wherein said accelerometer further comprises at least one piezoelectric elements comprising at least one of: at least a crystal, at least a coil, said piezoelectric elements being communicatively connected to at least a mass, said mass being in communication with at least a spring, said spring being operatively connected to at least a sliding pot, said sliding pot operatively configured to adjust an opening in said combustion chamber for the release of igniting gas thereto, for said at least one airbag.

82. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said weight sensing unit is further configured with at least a microprocessor to enable at least one of: translate said operating weight value into electrical energy proportionate to said weight measurements, controlling said electrical energy to energize

at least one accelerometer comprising at least a piezoelectric element, translating said electrical energy into mechanical energy, displacing at least a mass ~~and to~~ correspondingly ~~compressing~~ compress at least a spring, communicating ~~in communication~~ with at least a sliding pot correspondingly according to said weight measurements, releasing igniting gas through said sliding pot in association with said airbag assembly.

83. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 80, wherein said accelerometer further configured to transmit a first signal corresponding to said operating weight value to at least a microprocessor associated with said canister of igniting gas, said microprocessor being configured to process said first signal ~~and to~~ deliver to said relay a second signal corresponding to a specific volume of gas to be released into said combustion chamber, said specific volume of gas further comprising the amount of igniting gas required for said deployment force and acceleration for said at least one airbag inflation, ~~the amount of gas~~ being correspondingly proportionate to said weight measurements.

84. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 83, wherein said accelerometer further comprises at least one piezoelectric element operatively connecting said sliding pot to said combustion chamber for the release of igniting gas into said at least one airbag, wherein said airbag is configured to provide a proportionate inflation pressure when a collision sensor senses a collision has occurred of a severity requiring airbag deployment.

85. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 65 further comprising a collision sensor ~~operatively~~ communicatively connected to said at least one computerized system.

86. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65 further comprising a collision sensor operatively connected to said deployment unit.

87. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 85, wherein said collision sensor being operable to sense collision(.), and said at least one computerized system further ~~configured~~ operable for controlling the deployment of airbags in response to said collision severity threshold.

88. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 87, wherein said collision severity further comprises a threshold comprising at

least a collision substantially equivalent to said vehicle traveling at least between 10 m.p.h. and 15 m.p.h. and hitting at least a substantially rigid object.

89. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said at least one computerized system further configured to store said weight measurements and to erase said weight measurements for said at least one seat when said occupant leaves said at least one seat, and wherein at least a new weight measurement is being generated responsive to said weight of said new occupant sitting on said at least one seat.

90. Cancelled.

91. Cancelled.

92. Cancelled.

93. (Previously Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said weight sensing unit further comprises a detection apparatus operatively configured for detecting weight and for measuring weight capacity of at least 1 pound.

94. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65 further comprising signal amplifier apparatus being configured to amplify at least one of: analog signal, digital signal, binary signals, wherein said at least one signal is provided for controlling said supplemental restraint system.

95. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 65 further comprising a transient voltage suppressor communicatively connected to said at least one computerized system, said transient voltage suppressor being configured to filter out at least one of: transient spikes, transient force, travelling current, operable for preventing abnormal readings and/or abnormal communication signals to said airbag assembly.

96. Cancelled.

97. Cancelled.

98. Cancelled.

99. Cancelled.

100. Cancelled.

101. Cancelled.

102. Cancelled.

103. Cancelled.

104. (Previously Submitted) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said weight sensing unit being disposed between said seat mounting structure and the floor of the vehicle.

105. (Currently Amended) A vehicle occupant seat detection means and weight responsive system, comprising: at least a seat disposed with a mounting structure; at least a weight sensing unit disposed between said ~~seat~~ mounting structure and ~~a the~~ floor of a vehicle ~~operable~~ for providing at least a first sensor signal; at least a collision sensor configured for providing at least a second sensor signal; at least a computerized system comprising a module for receiving said first and second sensor signals respectively; at least a supplemental restraint system; and wherein said first and said second sensor signals, respectively, comprise weight measurements and collision force measurements being controllable by said computerized system for proper deployment of said supplemental restraint system;

106. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said at least one computerized system further operable for calculating a restraint value for said supplemental restraint system based upon at least the weight value of said at least one seated occupant and/or at least a collision force value according to the vehicle speed.

107. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 105, wherein said supplemental restraint system further configured for controlling airbag tension when a collision is sensed.

108. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said weight sensing unit further operable for converting said occupant's body weight into electrical energy.

109. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said weight sensing unit further comprising at least a strain gauge being disposed in a load cell.

110. (Previously Amended) The vehicle occupant seat detection means and weight responsive system of claim 65, wherein said load cell further comprising at least a silicon substrate.

111. (Currently Amended) The vehicle occupant seat detection means and weight responsive system of claim 105, wherein said weight sensing unit further comprises apparatus for detecting